

Introduction to the Symposium on Double-Crested Cormorants: Population Status and Management Issues in the Midwest

By Stephen J. Lewis and D. V. (Chip) Weseloh

Abstract: Populations of double-crested cormorants (*Phalacrocorax auritus*) have increased dramatically in the last 2 decades, particularly in the Great Lakes and the Southeastern United States. Their food habits and propensity for killing the trees in which they nest and roost have made cormorants the subject of much controversy. Cormorants affect—or are perceived to affect—sport fishing, aquaculture operations, vegetation, and other colonial waterbirds. Anglers, aquaculturists, resort operators, lake-home owners, politicians, and others are calling for a solution to these problems. This symposium was convened to provide information that will help conservation agencies and others make sound resource management decisions about cormorants. The objectives of the symposium were to:

(1) provide up-to-date information on the status and biology of double-crested cormorants; (2) review scientific evidence related to the impacts of cormorants on sport fish, aquaculture operations, vegetation, and other colonial waterbirds; (3) discuss options available to resolve human–cormorant conflicts and biological, social, economic, and political issues related to cormorant population control; (4) identify information needs (monitoring and research) related to cormorant management; and (5) enhance communication and coordination among all entities concerned about cormorants and the resources they can impact. Our emphasis is on the Midwest, but it is clear that migrant cormorants from other areas pass through this region and that all of these birds mix on the wintering grounds in the Southern United States.

Double-crested cormorants (DCCO's) are colonial waterbirds whose diet consists almost entirely of fish. They breed in large colonies of up to several thousand nests, often mixed with other species and can nest in trees or on the ground. Their breeding range includes the Great Lakes, Northeastern United States, and Great Plains, and they winter in the Southern United States and gulf coast, often in roosts numbering thousands of birds. Cormorant populations have increased dramatically in the last 2 decades in response to reduced contaminant levels, greater legal protection, and increased food availability on both their breeding and wintering grounds. Population increases have been especially large in the Great Lakes and the Southeastern United States.

Their food habits and propensity for killing the trees in which they nest and roost have made cormorants the subject of much controversy. They have been documented to affect, or are perceived to affect, sport fish populations, aquaculture operations, vegetation, and other colonial waterbirds. Headlines raise alarm with titles like “Voracious Varmints Wreak Havoc,” “An Unwanted Bird: Cormorants Peck Away at Fragile Lake Erie Island’s Ecosystem,” and “The Bird We Love To Hate.” There are also some headlines (although not as many) like “Cormorants Aren’t Cause of Diminished Fish Supply,” “Cormorants and Pelicans: Scapegoats for a Fishing Industry Gone Bad,” and “Heroes or Villains: Fishing for the Truth on Cormorants.”

Anglers, resort operators, fish farmers, lake-home owners, politicians, and others in the Midwest, from interior Minnesota to the upper Mississippi River to the Great Lakes, are calling for some kind of cormorant population control. Most wildlife agencies and conservation organizations do not believe there is strong evidence to warrant large-scale control of cormorant populations. However, this is a subject of much debate, even among professional biologists. Options for large-scale population control include regulated culling by resource management agencies or, through hunting seasons and depredation permits, by the public, or unregulated killing by the public following removal of the species from protection under Federal, State, and Provincial laws.

This symposium was convened to provide conservation agencies and others with information that will help them in making resource management decisions about cormorants. The objectives of the symposium were to:

- Provide up-to-date information on the status and biology of DCCO's;
- Review scientific evidence related to the impacts of cormorants on sport fish, aquaculture operations, vegetation, and other colonial waterbirds;
- Discuss options available to resolve human–cormorant conflicts, and biological, social, economic, and political issues related to cormorant population control;

- Identify information needs (monitoring and research) related to cormorant management; and
- Enhance communication and coordination among all entities concerned about cormorants and the resources they can affect.

Our emphasis is on the Midwest, especially the Great Lakes, but it is clear that migrant cormorants from farther north and west, and perhaps even to the east, pass through this region and that all of these birds mix on the wintering grounds in the Southern United States. Indeed, serious concerns about the impacts of cormorants have been raised recently in the Southeastern and Northeastern United States.

This symposium is meant to build on one held 5 years ago by the Colonial Waterbird Society (Nettleship and Duffy 1995). Since then, additional information on the status and biology of the DCCO has become available, and concerns about its impacts on other resources have increased. In this proceedings, Douglas Siegel-Causey reviews advances in our knowledge of cormorant biology and management since the 1992 symposium. He also discusses cormorant problems in Europe and how they are being addressed.

Laura Tyson et al. summarize recent survey data for cormorants in the United States and Canada and discuss the species' distribution and population trends. Sumner Matteson et al. and Connie Korfanty et al. present case studies of the cormorant situations in Wisconsin and Ontario, respectively. Three chapters by Glenn Belyea, Robert Ross, and Michael Bur and their coauthors provide information on cormorant diets in the Great Lakes and the relationship between cormorants and sport fish. John Trapp et al. discuss the U.S. Department of the Interior's U.S. Fish and Wildlife Service (FWS) and State agency positions on the impacts of cormorants on sport fish based on a literature review and questionnaires sent to the State agencies.

Cormorant impacts on aquaculture operations are reviewed by David Reinhold and Bo Sloan. They also discuss what is being done through the U.S. Department of Agriculture's (USDA) Wildlife Services (formerly Animal Damage Control) program to resolve cormorant depredation problems at aquaculture facilities. James Glahn et al. assess how southern catfish farms are affecting the overwintering body condition of cormorants and what the implications of this are to northern breeding populations.

Chapters by Mark Shieldcastle and Larry Martin and by Scott Jarvie et al. address the impacts of cormorants on vegetation and what this means to other species of colonial waterbirds that use the habitats being affected by the DCCO. Jean Bédard et al. present the results of a 5-year cormorant culling program in the St. Lawrence estuary. Chip Weseloh and Stephen Lewis report the results of a questionnaire provided to symposium participants on information needs related to cormorants. Finally, Francesca Cuthbert summarizes the symposium.

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Reference Cited

Nettleship, D. N.; Duffy, D. C., eds. 1995. The double-crested cormorant: biology, conservation and management. Colonial Waterbirds 18 (Spec. Publ. 1): 1–256.

